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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/707,925

01/26/2004

Daniel M. Wilkinson

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10/17/2007

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EXAMINER

BRINSON, PATRICK F

ART UNIT

PAPER NUMBER

3754

MAIL DATE

DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/707,925

Applicant(s)

DANIEL WILKINSON

Examiner

Patrick F. Brinson

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) 52-72 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10-19,26-28,35-43 and 73-78 is/are rejected.
- 7) ☒ Claim(s) 3-9,20-25,29-34 and 44-49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/26/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 10, 12, 14-18, 26-28, 35 37, 39-42, 50, 51 and 73-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,945,867 to **Heller, Jr. et al.** in view of U.S. 4,754,685 to **Kite et al.**

The patent to **Heller, Jr. et al.** discloses a hose (12) formed of a variety of materials, typically a semi-rigid thermoplastic material such as Nylon 11, a woven net of monofilament strands (16) and a cover layer (18) overlying the inner tube and encapsulating the woven strands. Though not drawn to scale, it appears from the figs. that the spacing between the monofilament strands ranges from 50-200% of the diameter of the strands, as recited in claim 28. It is further disclosed that the bonding properties of the adhesive layer (20) may be similar to the core (12), for example, a nylon 11 bonding agent for a nylon 11 core or a different material, as recited in claims 17, 18, 40 and 41. It is also disclosed that the net (14) may be formed of orientable polymer yarn, typically polyester or nylon, as recited in claims 18 and 42. Col. 4, line

56, discloses that typically the coating layer may typically be urethane rubber, as recited in claims 26, 27, 50 and 51. **Heller, Jr. et al.** does not specifically disclose the net (14) as being abrasion resistant. The patent to **Kite et al.** discloses an abrasion resistant braided sleeve that may be placed over pipes, conduits and the like to provide protection. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute for the braid material of **Heller, Jr. et al.** an abrasion resistant material as suggested by **Kite et al.** in order to protect the inner hose against abrasion should there be a breach in the outer cover layer. As to the diameter of the filaments and spacing of the monofilaments, **Heller Jr. et al.** discloses a thickness of .01 inch, however, it is considered an obvious choice of mechanical expedients to increase the diameter of the monofilaments in order to meet the needs of the user, wherein other factors, including flexibility, thickness of the bonding agent, to name a couple are determined to some extent on the diameter of the monofilaments, material of the monofilaments and their arrangements.

2. Claims 11, 13, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heller, Jr. et al.** in view of **Kite et al.** as applied to claims 2, 10, 28 and 35 above, and further in view of U.S. 4,585,035 to **Piccoli**.

The patent to **Heller, Jr. et al.**, as modified, does not specifically disclose the inner tube as being formed of a polyethylene nor of an elastomeric material. The

patent to **Piccoli** discloses a hose having an inner hose (1) formed from materials known for conveying and containing fluids, including elastomeric materials including rubber and semi-rigid materials such as polyethylene. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the inner tube of **Heller, Jr. et al.**, as modified, of an alternate semi-rigid material such as polyethylene or of an elastomeric material, as suggested by **Piccoli**, wherein it is known in the art that these materials may be substituted for each other to meet the needs of the user and depending on the type of material that is being conveyed.

3. Claim 19 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heller Jr. et al.** as applied to claims 19 and 40 above, and further in view of U.S. 4,007,070 to **Busdiecker**.

The patent to **Heller Jr et al.**, as modified discloses that the adhesive layer (20) may be formed of a material similar to that of the core or could be other materials, but does not disclose the use of urethane. The patent **Busdiecker** discloses a hose including an inner layer, a reinforcing layer (17) and an outer layer, and it is further disclosed that the tie layers (13 and 22) include Durbond 8412, which is a urethane adhesive. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute for the nylon adhesive of Heller, Jr. et al., as

modified, a urethane adhesive, as suggested by Busdiecker in order to alternatively bond the fabric netting to the inner hose.

Allowable Subject Matter

4. Claims 3-9, 20-25, 29-34, 44-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Johansen et al., Higbee, Washkewicz et al., Shewin, Buck et al., and Youngs are all pertinent to Applicant's invention in disclosing hoses with fabric or abrasion resistant layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (571) 272-4897. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kevin P. Shaver** can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patrick F. Brinson
Primary Examiner
Art Unit 3754

P. F. Brinson
October 15, 2007